

Inorganic compounds

Test medium	Chemical formula	Concentration %	temperature °C	pressure (bar)	carbon graphite, not impregnated	graphite, not impregnated	carbon graphite, resin impregnated	graphite, resin impregnated	resin bonded carbon	carbon graphite and graphite, antimony impregnated	carbon graphite and graphite, lead impregnated	carbon graphite and graphite, copper impregnated
1. Acids												
Boric acid, aqueous	H ₃ BO ₃	15	80	-	+	+	+	+	+	+	o	o
Chromic acid, aqueous	CrO ₃ + H ₂ O	20	20	-	+	+	+	+	+	+	+	-
Chromic acid, aqueous	CrO ₃ + H ₂ O	20	80	-	-	-	-	-	-	-	-	-
Chromic acid, aqueous	CrO ₃ + H ₂ O	40	20	-	+	+	+	+	+	+	+	-
Chromic acid, aqueous	CrO ₃ + H ₂ O	50	20	-	-	+	+	+	+	+	+	-
Chromic acid, aqueous	CrO ₃ + H ₂ O	50	40	-	-	+	-	+	-	-	+	-
Chromic acid, aqueous	CrO ₃ + H ₂ O	50	60	-	-	-	-	-	-	-	o	-
Chromic acid, aqueous	CrO ₃ + H ₂ O	60	20	-	-	o	o	o	-	-	o	-
Hydrofluoric acid, diluted	HF	20	20	-	+	+	+	+	+	-	-	o
Hydrofluoric acid, concentrated	HF	40	20	-	+	+	+	+	o	-	-	o
Aqua regia	HCl/HNO ₃ 3:1	100	20	-	+	+	+	+	+	-	-	-
Mixed acid	HNO ₃ /H ₂ SO ₄ 2:3	100	20	-	-	-	-	-	-	-	-	-
Perchloric acid, aqueous	HClO ₄	ca. 70	20	-	+	+	+	+	+	+	o	o
Phosphoric acid, ortho, concentrated	H ₃ PO ₄	85	130	-	+	+	+	+	+	+	-	-
Nitric acid, diluted	HNO ₃	38	20	-	+	+	+	+	-	-	-	-
Nitric acid, concentrated	HNO ₃	65	20	-	+	+	+	+	-	-	-	-
Nitric acid, concentrated	HNO ₃	65	80	-	-	+	-	-	-	-	-	-
Nitric acid, red fumins	HNO ₃ + N-Oxide	100	20	-	-	-	-	-	-	-	-	-
Nitric acid, vapors	NO ₂	100	20	-	-	-	-	-	-	-	-	-
Hydrochloric acid, diluted	HCl	20	20	-	+	+	+	+	+	+	-	o
Hydrochloric acid, diluted	HCl	20	50	-	+	+	+	+	+	-	-	o
Hydrochloric acid, diluted	HCl	20	80	-	+	+	+	+	+	-	-	-
Hydrochloric acid, concentrated	HCl	32	20	-	+	+	+	+	+	+	-	o
Hydrochloric acid, concentrated	HCl	32	50	-	+	+	+	+	+	-	-	-
Hydrochloric acid, concentrated	HCl	32	80	-	+	+	+	+	+	-	-	-
Hydrochloric acid, gas	HCl	100	20	-	+	+	+	+	-	+	-	+
Hadrochl. Acid, concentr.+chlorine	HCl + Cl ₂	40g Cl ₂ /l	20	-	+	+	+	+	+	o	-	o
Sulphur dioxide, concentr., liquid	SO ₂	99,7	10	ca. 3,35	+	+	+	+	+	+	+	+
Sulphuric acid, aqueous	H ₂ SO ₃	50g SO ₂ /l	20	-	+	+	+	+	+	+	+	+
Sulphuric acid, diluted	H ₂ SO ₄	25	20	-	+	+	+	+	+	+	+	+
Sulphuric acid, diluted	H ₂ SO ₄	25	80	-	+	+	+	+	+	o	+	-
Sulphuric acid, diluted	H ₂ SO ₄	50	20	-	+	+	+	+	+	+	+	+
Sulphuric acid, diluted	H ₂ SO ₄	50	80	-	+	+	+	+	+	o	o	-
Sulphuric acid, diluted	H ₂ SO ₄	62	20	-	+	+	+	+	+	+	+	+
Sulphuric acid, concentrated	H ₂ SO ₄	96	20	-	+	+	+	+	+	+	+	+
Sulphuric acid, concentrated	H ₂ SO ₄	96	50	-	+	+	+	+	+	+	+	+
Sulphuric acid, concentrated	H ₂ SO ₄	96	80	-	+	+	+	+	-	-	o	-
Sulphuric acid, concentrated	H ₂ SO ₄	96	120	-	+	+	+	+	-	-	-	-
Sulphuric acid, concentrated	H ₂ SO ₄	96	160	-	+	+	-	-	-	-	-	-
Sulphuric acid, concentrated	H ₂ SO ₄	96	200	-	o	o	-	-	-	-	-	-
Sulphuric acid, fumins (oleum)	H ₂ SO ₄ + SO ₃	H ₂ SO ₄ (100) + 60% SO ₃	20	-	-	-	-	-	-	-	-	-
Hydrogen sulfide water, cold, saturated	H ₂ S + H ₂ O	-	20	-	+	+	+	+	+	+	+	o

+ resistant o partially resistant - not resistant